

**RUBUS SIERRAE (ROSACEAE): A NEW SPECIES FROM CHIHUAHUA**

Joseph E. Laferrière

P.O. Box 23034, Providence, Rhode Island 02903 U.S.A.

ABSTRACT

*Rubus sierrae* is a new species of the Rosaceae from the Sierra Madre Occidental of Chihuahua, México. It is distinguished by its serrate sepals and ternate leaves.

RESUMEN

*Rubus sierrae* es nueva especie de las Rosáceas de la Sierra Madre Occidental de Chihuahua, México. Se distingue por sus sépalos serratos y sus hojas ternatas.

KEY WORDS: *Rubus*, blackberry, raspberry, mora, Chihuahua, Mountain Pima

Laferrière (1994) cited a specimen of the genus *Rubus* from Chihuahua, México, as "*Rubus arizonensis* Focke *vel aff.*" Closer examination indicates that the specimen differs significantly from this and all other known species. It is therefore described as a new member of the Rosaceae.

*Rubus sierrae* J.E. Laferrière, *spec. nov.* TYPUS: MEXICO. Chihuahua: Municipio Temósachi, in maple grove by banks of Río Yepachi, 4 km S of Nabogame, 28° 20' N, 108° 30' W, 1600 m, 28 Jul 1988, J.E. Laferrière 1579 (HOLOTYPUS: ARIZ; Isotypi: HUMO, MEXU).

*Rubus arizonensis* auct non Focke, *Phytologia* 77:128. 1994.

*Rubus* sp. 1 A. Harlan & P. Jenkins, in P.S. Martin *et al.*, *Gentry's Rio Mayo Pl.*, p. 426. 1998.

Folia pinnate ternate; foliola lanceolata, serrata, non lobata. Sepala lineara, proxime alba et pubenta, distale viridia et serrata.

Shrub erect, 1 m tall, pubescent; trichomes white, unbranches, sometimes with a yellowish gland at the base. Stems yellowish green, sparsely armed; prickles slightly curved, 1-4 mm long, slender at the base, tapering toward the tip, older stem prickles yellowish below, reddish in the middle, yellowish toward the tip. Leaves pinnately ternate; stipules filiform, pubescent, 0.5 cm long; petioles 2.0-3.5 cm long, yellowish green, pubescent, sparingly armed; leaflets lanceolate, biserrate, sparingly puberulent, green above, slightly lighter green below, bearing a few small prickles along the costa below; lateral leaflets 3.5-5.0 cm long, 1.5-2.7 cm wide; terminal leaflets 3.5-5.0 cm long, 2.5-3.0 cm wide, borne on a stalk 0.6-0.8 cm long. Flowers solitary, terminal on a leafy lateral branch; sepals nearly linear but slightly sinuate, constricted in the middle, 0.9-1.3 cm long, 0.2-0.3 cm wide, not reflexed, the proximal half linear, pale green, densely pubescent with many short hairs, the margins of the proximal half entire, the distal portion darker green, sparingly pubescent, bearing 3-5 pairs of serrations up to 1.0 mm deep; petals 0.5 cm long, white. Fruit and seeds unknown.

Named in memory of Dionysia Sierra Cruz (1985-87) of Nabogame.

Because of the lack of fruits, it is impossible to discern with certainty the plant's true relationships. Subgenera in the genus are delimited largely by fruit characters (Bailey 1940-45). The distinctive sepals, however, leave little doubt that it is indeed a new species. The vast majority of North American species of *Rubus* have entire, uniformly colored sepals. The solitary flowers are also unusual; most species of the genus have many-flowered panicles. The cultivated European species *R. laciniatus* Willd., naturalized in many parts of North America, has serrate, bicolored sepals like those of *R. sierrae*, but its sepals bear prickles. The leaves of *R. laciniatus* are generally deeply divided. *Rubus pedatus* Smith, which ranges from Alaska to Idaho and Oregon, has dentate sepals, but this is a small, mat-forming species with 5-foliolate leaves. *Rubus neomexicanus* A. Gray, *R. parviflorus* Nutt, and *R. trilobus* Seringe all bear two-tone sepals sometimes with a hint of serration, but all these species are entirely unarmed and bear simple, palmately lobed leaves. In vegetative characters, *R. sierrae* resembles *R. arizonensis*, but these are readily distinguished by the former's smaller, slenderer spines of nearly uniform thickness. The spines of *R. arizonensis* are swollen at the base and taper very gradually toward the tip.

The type locality of *Rubus sierrae* was included in Harlan & Jenkins's (1998) treatment of *Rubus* of the Río Mayo region. They list three named species; the description above of *R. sierrae* creates a fourth named species in the region. A key to the four is given below.

- Spines stout at base. .... *Rubus arizonensis* Focke
- Spines slender at base.
  - Sepals bicolored, proximally entire and with white pubescence, distally green and the margins serrate; flowers solitary. .... *R. sierrae* J.E. Laferr.
  - Sepals uniformly colored, the margins entire throughout; flowers corymbose
    - Leaves bicolored, abaxially glaucous, adaxially dark green. .... *R. leucodermis* Dougl.
    - Leaves uniformly dark green on both sides. .... *R. humistratus* Steud.

*Rubus sierrae* occurs in a riparian forest dominated by *Acer grandidentatum* Nutt. and *Cupressus lusitanica* Mill. This is an unusual habitat for the region, much moister

than the surrounding pine-oak forest. The Mountain Pima inhabitants of Nabogame refer to the plant as "mora." This is the same name they apply to the cultivated mulberry, *Morus rubra* L.

#### LITERATURE CITED

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